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EXAMINER

NGUYEN, THU HA T

ART UNIT PAPER NUMBER

2155

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6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,775

Applicant(s)

VOLPANO, DENNIS MICHAEL

Examiner

Thu Ha T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1- 61 are presented for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 58 and 60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. As per claims 58 and 60, the presence of the trademark or trade name "Sun QubeTM" and "Qube 3TM" is not proper under 35 U.S.C. 112, second paragraph (see 37 CFR 2173.05 (u)).

If the trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of the 35 U.S.C. 112, second paragraph. Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The scope of claim is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product.

5. Claim 1 recites the limitations "said wireless transceiver" (page 39, lines 24, 26, and page 40, line 1); "said first wireline network destined message: (page 40, line 3); "a second wireline network message including a destination (page 40, line 6). There is insufficient antecedent basis for this limitation in the claim. Likewise, the same

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112, 2nd rejection as insufficient antecedent basis for these limitations in other independent claims 6, 17, 31, 44, and 49.

6. Claims 12-15, and 26-29 lack of antecedent basis since independent claims and 17 claim a method, claims 12-15, and 26-29 claim as a program system. Therefore, claims 12-15, a program system claimed, cannot be depended on claim 6 as a method claimed and claims 26-29, a program system claimed, cannot depend on claim 17 as a method.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3, 5-10, 16-24, 30-38, 41-46, 48-49, 51, 53-56 are rejected under 35 U.S.C. § 102(e) as being anticipated by **Lincke et al.**, (hereinafter Lincke) U.S.

Patent No. **6,590,588**.

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9. As to claim 1, **Lincke** teaches the invention as claimed, including a wireless router supporting communications between a wireless client and a wireline network (figure 1) comprising:

at least one computer operating as a server based upon a program system comprising program steps residing in memory accessibly coupled with said computer (figure 1, element 180, col. 9, lines 8-10, 26-28);

said wireline network coupled to said server via a wireline communications port (figures 1, 4, elements 180, 190 – proxy server connects to Internet 190 using TCP, HTTP, SMTP, POP – read as communication port);

a wireless interface coupled to said server by a member of a wireless coupling collection and said wireless interface possessing a wireless transceiver (figures 1, 4-5, col. 3, lines 6-12, col. 18, lines 6-16);

wherein said wireless coupling collection is comprised of a bus coupling between said wireless interface and said server, and an interface coupling between said wireless interface and said server (figure 5, col. 84, lines 16-21);

wherein said bus coupling includes at least a member of the bus coupling collection comprising a PCI bus coupling, a Compact PCI bus coupling, and an ISA bus coupling; wherein said interface coupling includes at least one member of the interface coupling collection comprising a USB interface, an Ethernet interface, a fiber optic interface, an ATM interface, a STM interface, and a modem interface (figures 1, 5, col. 3, lines 6-14, col. 51, lines 54-59, col. 84, lines 16-21);

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wherein said Ethernet interface includes at least a member of the collection comprising a 1-Base T Ethernet interface, a 10-Base T Ethernet interface, a 100-Base T Ethernet interface, and a gigabit Ethernet interface (col. 51, lines 52-59);

wherein said fiber optic interface includes at least a member of the collection comprising a fiber channel compliant interface, an interface to a Time Division Multiplexing fiber optic network, an interface to a photonic switch fiber optic network, an interface to an optical subcarrier multiplexed fiber optic network and an interface to Wavelength Division Multiplexed fiber optic network (col. 51, lines 51-55);

wherein said program system is comprised of the program steps of: coupling said wireless interface to said wireline network via said wireline communications port as a server device with a network service address (figures 1, 4-5, col. 20, lines 1-16, col. 21, lines 18-29, col. 44, lines 35-51— wireless communication device 100 having wireless interface to Internet 190 (read as wireline network) via proxy server 180 (read as server device) via communication port (TCP, HTTP, POP, SMTP) with a network service address (IP address, serverID));

enabling address translation on said server to include said server device with said network service address (col. 11, lines 47-64, col. 44, lines 35-51);

adding a network route for said wireless interface on said server for said server device with said network service address (col. 20, lines 1-col. 21, lines 16, col. 63, lines 66-col. 64, lines 19 – every connection between wireless client and proxy server, it establishes a new connection route between wireless client and proxy server); and

making said wireless interface available to at least one wireless client communicating via said wireless coupling as a gateway to communicate on said wireline network (figures 4-5, col. 18, lines 6-16, lines 56-col. 19, lines 14, col. 81, lines 60-col. 82, lines 54);

a wireless client communicating via said wireless coupling based upon a login protocol accessing a client authorization list to create an authorized client (col. 43, lines 15-67, col. 45, lines 26-67- based on a security protocol, proxy server compares request message with a list of authorized clients to see if it matches or not); and

said authorized client communicating via said wireless coupling using said network route to communicate with said wireline network via said wireline communications port (col. 63, lines 66-col. 64, lines 19);

wherein the program step making said wireless interface available to said wireless client is further comprised of the program steps of: said wireless transceiver receiving a first message including a destination from said wireless client to create a first received message including said received destination at said wireless transceiver (figures 1, 4, col. 11, lines 32-64, col. 17, lines 36-col. 18, lines 65);

said wireless transceiver transmitting a second wireless destined message to said wireless client (figures 1, 4-5, col. 12, lines 48-64, col. 16, lines 46-53);

transmitting said first wireline network destined message including said wireline address via said wireline communications port (col. 11, lines 47-col. 12, lines 64, col. 16, lines 27-45, col. 20, lines 1-16); and

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receiving a second wireline network message including a destination containing said network service address to create a second wireline network message including said destination containing said network service address to said server device (figures 4-5, col. 16, lines 27-53, col. 18, lines 45-col. 19, lines 13);

wherein the program step enabling address translation on said server is further comprised of the program steps of: masquerading said first received message including said received destination to create a first wireline destined message including a first wireline address at said server device (figures 1, 4, col. 11, lines 32-64, col. 17, lines 36-col. 18, lines 65); and

demasquerading a second wireline network message including said destination address containing said network service address to create said second wireline originated message including said destination address containing said network service address (figures 4-5, col. 16, lines 27-53, col. 18, lines 45-col. 19, lines 13, col. 20, lines 1-36);

wherein the program step adding said network route for said wireless interface on said server is further comprised of the program steps of: routing said first wireline destined message at said wireless interface based upon said network route for said server device with said network service address to create a first wireline network destined message including said first wireline address (col. 11, lines 47-col. 12, lines 64, col. 16, lines 27-45, col. 20, lines 1-16, col. 77, lines 29-col. 79, lines 2, col. 80, lines 50-col. 81, lines 7); and

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routing a second wireline originated message including a destination containing said network service address to said server device based upon said network route for said server device with said network service address to create said second wireless destined message to said wireless client (figures 4-5, col. 16, lines 27-53, col. 18, lines 45-col. 19, lines 13, col. 81, lines 8-col. 82, lines 54);

wherein said wireless transceiver further supports at least the IEEE 802.11b messaging protocol standard in communicating with said wireless client (figures 1, 4-5). This feature deems to be inherent for wireless LAN technology. IEEE802.11b is specified for a wireless interface between wireless client and base station (see figure 1).

10. As to claim 2, **Lincke** teaches the invention as claimed, wherein said wireless interface further supports at least the IEEE 802.11a messaging protocol standard in communicating with said wireless client (figures 1, 4-5). This feature deems to be inherent for wireless LAN technology. IEEE802.11b is specified for a wireless interface between wireless client and base station (see figure 1).

11. As to claim 3, **Lincke** teaches the invention as claimed, wherein said wireless interface further supports at least a layer three messaging protocol in communicating with said wireless client including said server supporting layer three datagrams (col. 19, lines 47-67).

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12. As to claim 5, **Lincke** teaches the invention as claimed, wherein the program step enabling address translation on said server is further comprised of at least one member of the collection comprising the program steps of:

enabling address translation on said server to include said server device with said network service address by use of a static addressing scheme on said wireline network; enabling address translation on said server to include said server device with said network service address by use of a dynamic addressing scheme on said wireline network; translating said wireless interface address to an external wireline address; presenting said wireless interface address as said external wireline address; registering said wireless interface address as said external wireline address; and registering said wireless interface address as said external wireline address to a dynamic DNS service (figures 4-5, col. 11, lines 32-64, col. 16, lines 27-53, col. 17, lines 36-col. 19, lines 13, col. 20, lines 1-36, col. 63, lines 54-col. 64, lines 19).

13. As to claim 7, **Lincke** teaches the invention as claimed, wherein said first wireline network destined messages include said wireline address (col. 11, lines 47-col. 12, lines 64, col. 16, lines 27-45, col. 20, lines 1-16).

14. As to claim 8, **Lincke** teaches the invention as claimed, wherein said second wireless destined messages are sent to said authorized client (figures 1, 4-5, col. 12, lines 48-64, col. 16, lines 46-53).

15. As to claim 17, **Lincke** teaches the invention as claimed, including a method of providing communication between a wireless transceiver and a wireline network, wherein a wireless interface possessing said wireless transceiver is coupled to a server further coupled via a wireline communications port to said wireline network, comprising the steps of:

coupling said wireless interface to said wireline network via said wireline communications port as a server device with a network service address (figures 1, 4-5, col. 20, lines 1-16, col. 21, lines 18-29, col. 44, lines 35-51— wireless communication device 100 having wireless interface to Internet 190 (read as wireline network) via proxy server 180 (read as server device) via communication port (HTTP, SMTP, POP, TCP port) with a network service address (IP address, serverID));

enabling address translation on said server to include said server device with said network service address (col. 11, lines 47-64, col. 44, lines 35-51);

adding a network route for said wireless interface on said server for said server device with said network service address (col. 20, lines 1-col. 21, lines 16, col. 63, lines 66-col. 64, lines 19); and

making said wireless interface available to at least one wireless client communicating via said wireless coupling as a gateway to communicate on said wireline network (figures 4-5, col. 18, lines 6-16).

16. As to claim 18, **Lincke** teaches the invention as claimed, further comprising the steps of:

a wireless client communicating via said wireless coupling based upon a login protocol accessing a client authorization list to create an authorized client (col. 45, lines 26-67); and

said authorized client communicating via said wireless coupling using said network route to communicate with said wireline network (col. 63, lines 66-col. 64, lines 19).

17. As to claim 19, **Lincke** teaches the invention as claimed, wherein the step making said wireless interface available to said authorized client is further comprised of the steps of:

said wireless transceiver receiving a first message including a destination from said wireless client to create a first received message including said received destination at said wireless transceiver (figures 1, 4, col. 11, lines 32-64, col. 17, lines 36-col. 18, lines 65);

said wireless transceiver transmitting a second wireless destined message to said wireless client (figures 1, 4-5, col. 12, lines 48-64, col. 16, lines 46-53);

transmitting said first wireline network destined message including said wireline address via said wireline communications port (col. 11, lines 47-col. 12, lines 64, col. 16, lines 27-45, col. 20, lines 1-16); and

receiving a second wireline network message including a destination containing said network service address to create a second wireline network message including said destination containing said network service address to said server device (figures

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4-5, col. 16, lines 27-53, col. 18, lines 45-col. 19, lines 13); wherein the step enabling address translation on said server is further comprised of the steps of:

masquerading said first received message including said received destination to create a first wireline destined message including a first wireline address at said server device (figures 1, 4, col. 11, lines 32-64, col. 17, lines 36-col. 18, lines 65); and

demasquerading a second wireline network message including said destination address containing said network service address to create said second wireline originated message including said destination address containing said network service address (figures 4-5, col. 16, lines 27-53, col. 18, lines 45-col. 19, lines 13, col. 20, lines 1-36);

wherein the step adding said network route for said wireless interface on said server is further comprised of the steps of: routing said first wireline destined message at said wireless interface based upon said network route for said server device with said network service address to create a first wireline network destined message including said first wireline address (col. 11, lines 47-col. 12, lines 64, col. 16, lines 27-45, col. 20, lines 1-16, col. 77, lines 29-col. 79, lines 2, col. 80, lines 50-col. 81, lines 7); and

routing a second wireline originated message including a destination containing said network service address to said server device based upon said network route for said server device with said network service address to create said second wireless destined message to said wireless client (figures 4-5, col. 16, lines 27-53, col. 18, lines 45-col. 19, lines 13, col. 81, lines 8-col. 82, lines 54).

18. As to claim 20, **Lincke** teaches the invention as claimed, wherein said wireless interface supports a message passing communications protocol in communicating with said wireless client (figure 5).

19. As to claim 21, **Lincke** teaches the invention as claimed, wherein said wireless transceiver further supports at least a layer two messaging protocol in communicating with said wireless client (col. 19, lines 47-67).

20. As to claim 41, **Lincke** teaches the invention as claimed, wherein said interface coupling includes at least one member of the interface coupling collection comprising a USB interface, an Ethernet interface, a fiber optic interface, an ATM interface, a STM interface, and a modem interface (figures 1, 5, col. 3, lines 6-14, col. 51, lines 54-59, col. 84, lines 16-21).

21. As to claim 42, **Lincke** teaches the invention as claimed, wherein said Ethernet interface includes at least a member of the collection comprising a 1-Base T Ethernet interface, a 10-Base T Ethernet interface, a 100-Base T Ethernet interface, and a gigabit Ethernet interface (col. 51, lines 52-59).

22. As to claim 43, **Lincke** teaches the invention as claimed, wherein said fiber optic interface includes at least a member of the collection comprising a fiber channel compliant interface, an interface to a Time Division Multiplexing fiber optic

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network, an interface to a photonic switch fiber optic network, an interface to an optical subcarrier multiplexed fiber optic network and an interface to Wavelength Division Multiplexed fiber optic network (col. 51, lines 51-55).

23. As to claim 51, **Lincke** teaches the invention as claimed, wherein the step coupling said wireless interface is comprised of at least one member of the collection comprising the steps of: coupling said wireless interface to said server using said bus coupling; and coupling said wireless interface to said server using said interface coupling (figures 1, 5, col. 3, lines 6-14, col. 51, lines 54-59, col. 84, lines 16-21).

24. As to claim 53, **Lincke** teaches the invention as claimed, wherein the step coupling said wireless interface to said server using said interface coupling is further comprised of at least one member of the collection comprising the steps of: coupling said wireless interface to said server using said USB interface; coupling said wireless interface to said server using said Ethernet interface; coupling said wireless interface to said server using said fiber optic interface; coupling said wireless interface to said server using said ATM interface; coupling said wireless interface to said server using said STM interface; and coupling said wireless interface to said server using said modem interface (figures 1, 5, col. 3, lines 6-14, col. 51, lines 54-59, col. 84, lines 16-21).

25. As to claim 54, **Lincke** teaches the invention as claimed, wherein the step coupling said wireless interface to said server using said Ethernet interface is further comprised of at least one member of the collection comprising the steps of: coupling said wireless interface to said server using a 1-Base T Ethernet interface; coupling said wireless interface to said server using a 10-Base T Ethernet interface; coupling said wireless interface to said server using a 100-Base T Ethernet interface; coupling said wireless interface to said server using a gigabit Ethernet interface (col. 51, lines 52-59).

26. As to claim 55, **Lincke** teaches the invention as claimed, wherein the step coupling said wireless interface to said server using said fiber optic interface is further comprised of at least a member of the collection comprising the steps of: coupling said wireless interface to said server using a fiber channel compliant interface; coupling said wireless interface to said server using an interface to a Time Division Multiplexing fiber optic network; coupling said wireless interface to said server using an interface to a photonic switch fiber optic network; coupling said wireless interface to said server using an interface to an optical subcarrier multiplexed fiber optic network; and coupling said wireless interface to said server using an interface to a Wavelength Division Mutliplexed fiber optic network (col. 51, lines 51-55).

27. As to claims 6, 9-10, 16, 22-24, 30, 36-38, 44-46, 48-49, and 56 have similar limitations to claims 1-3 and 5; therefore, they are rejected under the same rationale

28. As to claims 31-35 have similar limitations to claims 17-21; therefore, they are rejected under the same rationale.

Claim Rejections - 35 USC § 103

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claims 4, 11, 25, 39, 47 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Lincke** U.S. Patent No. **6,590,588**, in view of **Lee et al.**, (hereinafter **Lee**) U.S. Patent Application Publication No. **US 2002/0101848**.

31. As to claim 4, **Lincke** does not explicitly teach the invention as claimed; however, **Lee** teaches wherein said wireless interface further supports a messaging protocol compatible with WAP in communicating with said wireless client (figures 4-5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Lincke** system to include the WAP feature in communicating with said wireless client because it would have an efficient communications system for providing wireless devices with secure access to Internet information.

32. As to claims 11, 25, 39 and 47, they are system and method claims directed to a communications system between wireless device and wireline network of method claim 4. Claims 11, 25, 39 and 47 have similar limitations to claim 4; therefore, they are rejected under the same rationale.

33. Claims 12-15 and 26-29 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Lincke** U.S. Patent No. **6,590,588**, in view of **Frailong et al.**, (hereinafter **Frailong**) U.S. Patent No. **6,230,194**.

34. As to claim 12, **Lincke** does not explicitly teach the invention as claimed; however, **Frailong** teaches a program steps residing in at least one memory accessibly coupled with a computer operating said server; wherein said memory includes at least one member of the collection comprising a non-volatile memory component accessibly coupled with said computer, a volatile memory component accessibly coupled with said computer, and a removable non-volatile memory component inserted into a memory component reader coupled with said computer forming an accessible coupling of said removable non-volatile memory component with said computer (figure 3, col. 5, lines 58-col. 6, lines 30). It would have been obvious to one skill in the art at the time the invention was made to modify **Lincke**'s system to include a memory in server because it would provide an efficient server system that includes memory in order to store and retrieve information.

35. As to claim 13, **Lincke** does not explicitly teach the invention as claimed; however, **Frailong** teaches an upgrade package containing a version of a program system reside in at least one memory accessibly coupled with a computer operating said server (abstract, figures 2, 5, elements 206, 208, col. 5, lines 16-32- gateway interface device 208 read as server containing configuration information and service configuration file). It would have been obvious to one of ordinary skill in the art at the time invention was made to modify the teaching of **Lincke** to include an upgrade packet resides in memory of server because it would provide an efficient communications system of securely and automatically upgrading or reconfiguring the network interface device without user intervention.

36. As to claim 14, **Frailong** teaches the invention as claimed, wherein said upgrade package is accessibly coupled with an upgrade server communicatively accessible to said computer operating said server, said upgrade server providing said upgrade package to said computer (figures 2, 5, col. 5, lines 16-56, col. 8, lines 18-62). It would have been obvious to one skill in the art at the time the invention was made to have then same motivation as set forth in claim 13, supra.

37. As to claim 15, **Frailong** teaches the invention as claimed, wherein said upgrade server is operated by a method including the steps of: establishing communications between said upgrade server and said server (figures 2, 5, col. 5, lines 16-32- remote server 206 (read as upgrade server) connects with gateway interface

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device 208 (read as server) via ISP and Internet 204); and transmitting said upgrade package to said server via said communications to provide said upgrade package to said server (figures 2, 5, col. 5, lines 16-32- remote server 206 provides configuration information, service configuration files and upgrade parameters (read as upgrade packet) to gateway interface device (read as server)); wherein said server is operated by a method including the steps of: receiving said provided upgrade package from said upgrade server to create a received upgrade package; and processing said received upgrade package to create said program system (figures 2, 5, col. 5, lines 16-51) It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lincke's system to have the same motivation as set forth in claim 13, supra.

38. As to claim 26-29, they are system claims directed to a communications system between wireless device and wireline network of method claims 12-15. Claims 26-29 have similar limitations to claims 12-15; therefore, they are rejected under the same rationale.

39. Claims 40, 50, 52, and 57 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Lincke** U.S. Patent No. **6,590,588**, in view of **Rueda et al.**, (hereinafter Rueda) U.S. Patent Application Publication No. **US 2002/0112076**.

40. As to claim 40, **Lincke** does not explicitly teach the invention as claimed; however, **Rueda** teaches wherein said bus coupling includes at least a member of the bus coupling collection comprising a PCI bus coupling, a Compact PCI bus coupling, and an ISA bus coupling (paragraphs 0251-0252). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of **Lincke and Rueda** to include bus coupling comprising a PCI bus because it would allow for multiplexing that permits multiple processes running dynamically and simultaneously

41. As to claim 50, **Lincke** does not explicitly teach the invention as claimed; however, **Rueda** teaches wherein said wireless interface is a PCMCIA wireless LAN PC card; wherein the step coupling said wireless interface is further comprised of the steps of: inserting a PCMCIA Card Reader into a PCI/ISA slot coupled with said server; and inserting said PCMCIA wireless LAN PC card into said Card Reader (paragraphs 0021, 0026, 0251-0252). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of **Lincke and Rueda** to include PCMCIA card and PCI/ISA slot because it would provide an efficient wireless communications system that requires more storage space.

42. As to claim 57, **Lincke** does not explicitly teach the invention as claimed; however, **Rueda** teaches wherein the step running said host configuration protocol is further comprised of a member of the collection comprising the steps of running a version of DHCP on said wireless interface by said server; running a version of BOOTP

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on said wireless interface by said server; running a version of Appletalk on said wireless interface by said server; and running a version of VLAN on said wireless interface by said server (paragraphs 0012-0015, 0146-0149, 0217-0218). It would have been obvious to one skill in the art at the time the invention was made to combine the teaching of **Lincke and Rueda** to include the step of running host configuration protocol in different version of protocols because it would allow client connect to Internet and be able to exchange data with any other host in the Internet.

43. As to claim 52, it is a method claim directed to a communications system between wireless device and wireline network of system claim 40. Claim 52 has similar limitations to claim 40; therefore, they are rejected under the same rationale.

44. Claims 58-61 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Lincke** U.S. Patent No. **6,590,588**, in view of **Sun Microsystems, Inc.** Non-Patent Literature dated October 27, 2000.

45. As to claim 58, **Lincke** teaches the invention as claimed, including a wireless router supporting communications between a wireless client and a wireline network comprising:

a wireless interface coupled to a server and possessing a wireless transceiver (figures 4-5 - wireless client 405 connects to wireless network access point 410 which has wireless network interface and transceiver connect to proxy server 180);

said wireline network coupled to said server via a wireline communications port (figure 4, col. 11, lines 47-col. 12, lines 64, col. 16, lines 27-45, col. 20, lines 1-16);

at least one computer operating said server based upon a program system comprising program steps residing in memory accessibly coupled with said computer (figure 1, element 180, col. 9, lines 8-10, 26-28);

wherein said program system is comprised of the program steps of: coupling said wireless interface to said wireline network via said wireline communications port as a server device with a network service address (figures 1, 4-5, col. 20, lines 1-16, col. 21, lines 18-29, col. 44, lines 35-51— wireless communication device 100 having wireless interface to Internet 190 (read as wireline network) via proxy server 180 (read as server device) via communication port (TCP, HTTP, POP, SMTP port) with a network service address (IP address, serverID));

enabling address translation on said server to include said server device with said network service address (col. 11, lines 47-64, col. 44, lines 35-51, col. 44, lines 35-51 – serverID is a network address);

adding a network route for said wireless interface on said server for said server device with said network service address (col. 20, lines 1-col. 21, lines 16, col. 63, lines 66-col. 64, lines 19, col. 81, lines 60-col. 82, lines 54); and

making said wireless interface available to at least one wireless client communicating via said wireless coupling as a gateway to communicate on said wireline network (figures 4-5, col. 18, lines 6-16, lines 56-col. 19, lines 14, col. 81, lines 60-col. 82, lines 54). However, **Lincke** does not explicitly teach server is a member of the Sun

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Qube product collection comprising at least a Qube 3. Sun Microsystems teaches server is a member of the Sun Qube product collection comprising at least a Qube 3 (page 1). It would have been obvious to one of ordinary skill in the art at the time invention was made to modify the server system of **Lincke** to include a Sun Qube 3's functionality because it would provide an efficient communications system that could securely routing, managing, monitoring and sharing documents of files across the network.

46. As to claim 59, **Lincke** teaches the invention as claimed, wherein said wireless interface is a radio network interface (figure 4, col. 18, lines 1-16).

47. As to claim 60, **Lincke** teaches the invention as claimed, including a method of providing communication between a wireless transceiver and a wireline network, wherein a wireless interface possessing said wireless transceiver is coupled to a server further coupled via a wireline communications port to said wireline network (figures 1, 4-5), comprising the steps of:

coupling said wireless interface to said wireline network via said wireline communications port as a server device with a network service address (figures 1, 4-5, col. 20, lines 1-16, col. 21, lines 18-29, col. 44, lines 35-51— wireless communication device 100 having wireless interface to Internet 190 (read as wireline network) via proxy server 180 (read as server device) via communication port (TCP, HTTP, POP, SMTP port) with a network service address (IP address, serverID));

enabling address translation on said server to include said server device with said network service address (col. 11, lines 47-64, col. 44, lines 35-51);

adding a network route for said wireless interface on said server for said server device with said network service address (col. 20, lines 1-col. 21, lines 16, col. 63, lines 66-col. 64, lines 19, col. 81, lines 60-col. 82, lines 54 – every request and response sends to/from wireless client to/from proxy server, it establishes a new connection route between wireless client and proxy server); and

making said wireless interface available to at least one wireless client communicating via said wireless coupling as a gateway to communicate on said wireline network (figures 4-5, col. 18, lines 6-16, lines 56-col. 19, lines 14, col. 81, lines 60-col. 82, lines 54). However, **Lincke** does not explicitly teach server is a member of the Sun Qube product collection comprising at least a Qube 3. Sun Microsystems teaches server is a member of the Sun Qube product collection comprising at least a Qube 3 (page 1). It would have been obvious to one of ordinary skill in the art at the time invention was made to modify the server system of **Lincke** to include a Sun Qube 3's functionality because it would provide an efficient communications system that could securely routing, managing, monitoring and sharing documents of files across the network).

48. As to claim 61, **Lincke** teaches the invention as claimed, wherein said wireless interface is a radio network interface (figure 4, col. 18, lines 1-16).

Conclusion

49. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see attached PTO-892)

50. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Ha Nguyen, whose telephone number is (703) 305-7447. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

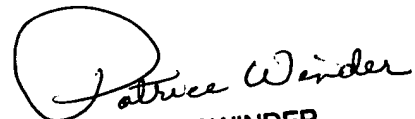
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam, can be reached at (703) 308-6662.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications.

Thu Ha Nguyen

June 19, 2004


PATRICE WINDER
PRIMARY EXAMINER